

Lawrence Livermore National Laboratory

DOE NCSP Website Integral Experiments Request Form



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Presented at the Nuclear Criticality Safety Program Technical Conference
at Oak Ridge National Laboratory, March 1-2, 2011

Lawrence Livermore National Laboratory, P.O. Box 808, L-198, Livermore, CA 94551-0808

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Topics of this briefing

- **Brief history of the Integral Experiments Request (IER) Form**
- **The current IER Form**
- **Future plans**
- **Q & A**



History of the Integral Experiments Request form

REQUEST FOR INTEGRAL EXPERIMENTS

Date: _____

Requestor Name: _____

Affiliation: _____

E-mail Address: _____

Telephone No.: _____

Experimental Request Title: _____

Description of Experimental Application (same level of detail as in DOE-STD-3007-2007): _____

Select those that apply and explain:

☐ Efficiency _____ ☐ Regulatory Risk _____ ☐ Compliance _____

☐ Criticality Safety _____ ☐ Date When Data Needed _____

Programmatic Funding Available or Identify Funding Source: _____

User Assessment of Available Integral Data (ICSBEP, Published, Un-Published, etc.) _____

Suggested Experiment Concept (describe measured parameters to meet data needs) _____

NCSP Manager Section Only

Tracking/Unique Number: _____

☐ Meets Requirements to Submit to NDAG

☐ Does Not Meet Requirements to Submit to NDAG

NDAG Section Only

NDAG Actions: _____

Concurrence: _____

☐ No New Experiment Needed

☐ Recommend CED-0 Approval

NCSP Approval

NCSP Manager Approval CED-0: _____

Draft 3-23-07



History of the Integral Experiments Request form – cont.

- **A simple one page on-line request form**
- **A web-based form provides 24/7 access to Integral Experiment Requests**
- **Contain four layers of security protections for the individual form, NCSP End User, NDAG Chairperson, and NCSP Manager**
 - Access by End User is control by sub-domain (e.g. .doe.gov, .anl.gov, .llnl.gov, .lanl.gov, .ornl.gov, etc.)
 - Access to individual request form is control by eight randomly generated characters
 - Access to NDAG Chairperson's web page is control by username and password
 - Access NCSP Manager's web page is control by username and password
- **The URL address for Integral Experiments request form is <http://ncsp.llnl.gov/ced/CEDhomepage.html>**



Topics of this briefing

- Brief history of the Integral Experiments Request (IER) Form
- The current IER Form
- Future plans
- Q & A



The current IER Form

This simple IER form has been transformed into a dynamic and flexible on-line web-based workflow request form.

- **A web-based workflow form provides 24/7 access**
 - to submit IER request,
 - to inquire of IER form status,
 - to enable End User to communicate and collaborate with C_EdT members,
 - to upload data into IER form (input and output data, required documents, etc),
 - to enable NCSP Management to process CED-0, CED-1, CED-2, CED-3, and CED-4 approval.

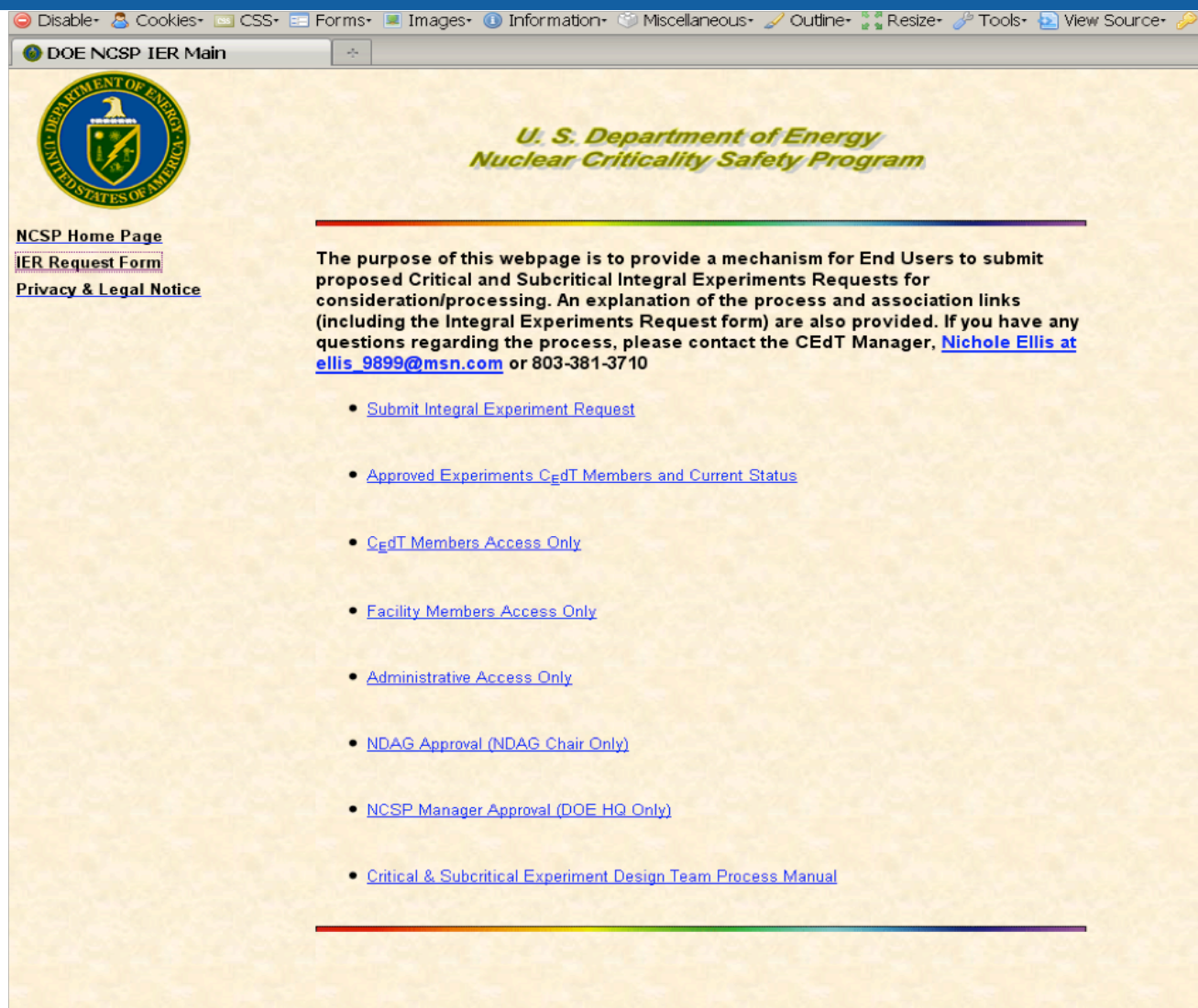


The current IER Form – cont.

- **Provided multiple layers of security protections for the individual form. All IER form accesses are controlled based on “defense-in-depth” philosophy.**
 - Access by End User is control by sub-domain.
(e.g. .doe.gov, .anl.gov, .llnl.gov, .lanl.gov, .ornl.gov, etc.)
 - Access to individual request form is control by eight randomly generated characters.
 - Access to IER form approval status beyond CED-0 can be controlled by NCSP manager.
 - Access to CEEdT members web pages are control by username and password.
 - Access to Facility members web pages are control by username and password.
 - Access to administrative members web pages are control by username and password.
 - Access to NDAG Chairperson’s web page is control by username and password .
 - Access NCSP Manager’s web pages are control by username and password
- **The URL address for Integral Experiments request form is <http://ncsp.llnl.gov/ced/CEDhomepage.html>**



IER Form – Main page



The screenshot shows a web browser window with the address bar displaying "DOE NCSP IER Main". The page features the U.S. Department of Energy logo on the left and the title "U. S. Department of Energy Nuclear Criticality Safety Program" in the center. Below the logo, there are links for "NCSP Home Page", "IER Request Form", and "Privacy & Legal Notice". The main content area contains a paragraph explaining the purpose of the webpage and a list of links for various users.

U. S. Department of Energy
Nuclear Criticality Safety Program

[NCSP Home Page](#)
[IER Request Form](#)
[Privacy & Legal Notice](#)

The purpose of this webpage is to provide a mechanism for End Users to submit proposed Critical and Subcritical Integral Experiments Requests for consideration/processing. An explanation of the process and association links (including the Integral Experiments Request form) are also provided. If you have any questions regarding the process, please contact the CE&T Manager, [Nichole Ellis at ellis_9899@msn.com](mailto:Nichole.Ellis@msn.com) or 803-381-3710

- [Submit Integral Experiment Request](#)
- [Approved Experiments CE&T Members and Current Status](#)
- [CE&T Members Access Only](#)
- [Facility Members Access Only](#)
- [Administrative Access Only](#)
- [NDAG Approval \(NDAG Chair Only\)](#)
- [NCSP Manager Approval \(DOE HQ Only\)](#)
- [Critical & Subcritical Experiment Design Team Process Manual](#)



IER Form – Submit Integral Experiment Request

Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools View Source Options

DOE NCSP IER Main REQUEST FOR INTEGRAL ...

REQUEST FOR INTEGRAL EXPERIMENTS FORM

NOTICE: The End User must verify all information is **UNCLASSIFIED**

Please provide the following information:

Form Status: Working draft

Requestor Name:
Last Name: [] First Name: [] Middle Name: []
Affiliation: []
E-mail Address: []
Retype E-mail Address: []
Telephone No.: []
[*] Required fields

Experimental Request Title: [] [80 chars max]
Description of Application/Purpose (same level of detail as in DOE-STD-3007-2007): [6000 chars max]

Description of Application/Purpose:
Please provide a brief description of the IER's application/purpose with the same level of detail as in DOE-STD-3007-2007 in 6000 or less characters.

Select Those That Apply and Explain:
Programmatic Funding Available (optional): []
User Assessment of Available Integral Data (ICSBEF, Published, UnPublished, etc.): [6000 chars max]

Suggested Experiment Concept (optional): [6000 chars max]



IER Form – Submit Integral Experiment Request - cont.

Disable+ Cookies+ CSS+ Forms+ Images+ Information+ Miscellaneous+ Outline+ Resize+ Tools+ View Source+ Options+

DOE NCSP IER Main REQUEST FOR INTEGRAL ...

C&DT Manager Comments:[6000 chars max]

NDAG Chairperson Comments:[6000 chars max]

NCSP Manager Comments:[6000 chars max]

C&DT MANAGER Section Only

Tracking/Unique Number:

☐ Meets Requirements to Submit to NDAG
☐ Does Not Meet Requirements to Submit to NDAG

NDAG Section Only

NDAG Actions:

Concurrence (Type Name):

☐ No New Experiment Needed
☐ Recommend IER-0 Approval

NCSP Approval

NCSP Manager Approval IER-0:

The Requestor acknowledges all information is approved for public release. ☐ I Agree

DC Name or Review and Release Number:

Derivative Classifier or Review and Release #:
 Please enter your Derivative Classifier's name or Review and Release number.



IER Form – Requestor receives email confirmation

From: akahler@lanl.gov <akahler@lanl.gov>
Date: Tuesday, February 8, 2011 7:00 AM
To: akahler@lanl.gov <akahler@lanl.gov>
Cc: Default <lee12@llnl.gov>
Subject: Request For Integral Experiments Form – 8KUY4CXT

Form Status: Final
Name: Albert (Skip) Kahler
Affiliation: LANL
E-mail: akahler@lanl.gov
Telephone: 505-606-2042
Experimental Request Title: Be Reflector Studies
Please click on the URL below to display IER form.
http://ncsp.llnl.gov/cgi-bin/display_form.pl?Tracking=8KUY4CXT

Access to individual request form is protected by an Unique Tracking number



IER Form – Approved Experiments CEdT Members and Current Status

| Approved Experiments CEdT Members and Current Status | | | | | | | | | |
|--|---------------|---|-------------|-----------------------|-----------------------|----------------|--------------------|-------------------|-----------------|
| Record No. | Priority-Year | Experimental Request Title | Type | User Name | NDAG Member | Methods Member | Experiment Member | ICSBEP evaluator | Status |
| 110 | On hold | Plutonium Sphere Reflected with Tungsten | Subcritical | Hutchinson, Jesson | McKnight, Dick | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-4 Initiated |
| 129 | 2-2011 | Integral Tests of Molybdenum at VNIITF | Critical | Briggs, J. Blair | McKnight, Dick | Hopper, Calvin | Shmakov, Vladimir | Shmakov, Vladimir | CED-4 Initiated |
| 114 | On hold | Plutonium Sphere Reflected with Acrylic | Subcritical | Hutchinson, Jesson | McKnight, Dick | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-4 Initiated |
| 106 | On hold | Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data | Subcritical | Mattingly, John Kelly | McKnight, Dick | Hopper, Calvin | Hayes, Dave | Mattingly, John | CED-4 Initiated |
| 126 | 1-2010 | SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses | Critical | Miller, Thomas Martin | McKnight, Dick | Hopper, Calvin | Authier, Nicolas | Ellis, Nichole | CED-3 Initiated |
| 130 | On hold | Integral Tests of Nickel at VNIITF | Critical | Briggs, J. Blair | McKnight, Dick | Hopper, Calvin | Shmakov, Vladimir | Shmakov, Vladimir | CED-3 Initiated |
| 109 | On hold | Plutonium Sphere Reflected with Nickel | Subcritical | Hutchinson, Jesson | McKnight, Dick | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-2 Initiated |
| 112 | On hold | Plutonium Sphere Reflected with Lead | Subcritical | Hutchinson, Jesson | McKnight, Dick | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-2 Initiated |
| 111 | On hold | Plutonium Sphere Reflected with Copper | Subcritical | Hutchinson, Jesson | McKnight, Dick | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-2 Initiated |
| 113 | On hold | Plutonium Sphere Reflected with Manganese | Subcritical | Hutchinson, Jesson | Heinrichs, David Paul | Hopper, Calvin | Hutchinson, Jesson | Bess, John | CED-2 Initiated |
| 134 | 8-2010 | This is a test | | Lee, Chuck K | Heinrichs, David Paul | Hopper, Calvin | Ellis, Nichole A. | Scott, Lori | CED-1 Pending |
| 135 | | Reactor Physics and Criticality Benchmark Experiments for Advanced Nuclear Fuel | | Harms, Gary Alan | Heinrichs, David Paul | Hopper, Calvin | Harms, Gary A | Harms, Gary A | CED-1 Initiated |
| 137 | | High Precision HEU Critical Assembly Measurements To Understand Reproducibility | | White, Morgan C | | | | | CED-1 Pending |
| 138 | | Probability of Initiation Benchmark Experiments | | Jaegers, Peter J | | | | | CED-1 Pending |
| 136 | | Reaction rate and fission-product yield measurements in Pu-239 and U-238 | | Bredeweg, Todd | | | | | CED-1 Pending |



IER Form – C_{Ed}T Members Access Only

| C _{Ed} T Members Process Status | | | | | | | | | | |
|--|--------------------------|--------------|---------------|-----------------------|---|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| Record No. | Tracking number | Request Date | Priority-Year | Requestor Name | Experimental Request Title | CED-0 | CED-1 | CED-2 | CED-3 | CED-4 |
| 110 | EZ2BKIOQ | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Tungsten | Approved | Approved | Approved | Approved | Initiated |
| 129 | GS6W8HNU | 2010-05-20 | 2-2011 | Briggs, J. Blair | Integral Tests of Molybdenum at VNIITF | Approved | Approved | Approved | Approved | Initiated |
| 114 | TSG5K9LN | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Acrylic | Approved | Approved | Approved | Approved | Initiated |
| 106 | SW3S8JHK | 2007-12-19 | On hold | Mattingly, John Kelly | Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data | Approved | Approved | Approved | Approved | Initiated |
| 126 | RBX5YNY7 | 2009-11-18 | 1-2010 | Miller, Thomas Martin | SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses | Approved | Approved | Approved | Initiated | |
| 130 | 7POMVQ2E | 2010-05-20 | On hold | Briggs, J. Blair | Integral Tests of Nickel at VNIITF | Approved | Approved | Approved | Initiated | |
| 109 | 5RFRO0UM | 2008-05-27 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Nickel | Approved | Approved | Initiated | | |
| 112 | CES6HH0I | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Lead | Approved | Approved | Initiated | | |
| 111 | GFG3M0HP | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Copper | Approved | Approved | Initiated | | |
| 113 | Z3TF8JKY | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Manganese | Approved | Approved | Initiated | | |
| 134 | BFD48UOO | 2010-08-17 | 8-2010 | Lee, Chuck K | This is a test | Approved | Pending | | | |
| 135 | 2FRVJON8 | 2010-09-07 | | Harms, Gary Alan | Reactor Physics and Criticality Benchmark Experiments for Advanced Nuclear Fuel | Approved | Initiated | | | |
| 137 | W1QCY0HU | 2010-10-11 | | White, Morgan C | High Precision HEU Critical Assembly Measurements To Understand Reproducibility | Approved | Pending | | | |
| 138 | ZBCTUJYU | 2010-10-18 | | Jaegers, Peter J | Probability of Initiation Benchmark Experiments | Approved | Pending | | | |
| 136 | 2FSFO7MJ | 2010-09-30 | | Bredeweg, Todd | Reaction rate and fission-product yield measurements in Pu-239 and U-238,235 | Approved | Pending | | | |



IER Form – C_EdT Members Access Only – cont.

DOE NCSP IER Main Display CEDT Members Pr...

CEDT Process Status: CED-3

➔ PREVIOUS

Request Date: 2009-11-18 Priority Year: 1-2010 CEDT Status: Initiated

Tracking/Unique Number: RB-SYN7

Requestor Name:

Last Name: Miller First Name: Thomas Middle Name: Martin E-mail Address: millerfm@ornl.gov

Affiliation: Oak Ridge National Laboratory

Telephone No.: 865-574-9909

Experimental Request Title: SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses

Experiment Type: Critical

NCSP Manager comments: [1000 chars max]

This is authorized for performance according to the Final Design Plan.

File Attachment(s): Select a file to upload into IER form:

[ced-0.doc](#)
[partially_shielded_pictures.doc](#)
[SILENE_2010_CED-2_final_plan.doc](#)
[SILENE_2010_CED-2_final_plan.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.doc](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL1.pdf](#)
[SILENE_LasVegas_CED2.pdf](#)

NDAG Member:

Last Name: First Name: Middle Name: E-mail Address:

McKnight Dick rdmcknight.gov

Heinrichs David Paul heinrichs1.gov

Methods Member:

Last Name: First Name: Middle Name: E-mail Address:

Hopper Calvin hoppercm.gov

Experiment Member:

Last Name: First Name: Middle Name: E-mail Address:

Authier Nicolas nicolas-authier@orange.fr

Re-Type E-mail Address: nicolas-authier@orange.fr

ICSBEP evaluator:

Last Name: First Name: Middle Name: E-mail Address:

Ellis Nichole ellis_9893@msn.com

Re-Type E-mail Address: ellis_9893@msn.com

Modify CEDT Status: CED-3 UNLOCK CED-2

☐ Pending ☐ Approved ☐ Unlock CED-2

☐ Initiated ☐ Completed

Print Page Close Window



IER Form – Facility Members Access Only

DOE NCSP IER Main Display CEDT Members Pr...

CEDT Members Process Status

| Record No. | Tracking number | Request Date | Priority-Year | Requestor Name | Experimental Request Title | CED-0 | CED-1 | CED-2 | CED-3 | CED-4 |
|------------|--------------------------|--------------|---------------|-----------------------|---|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| 110 | EZ2BKIQ0 | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Tungsten | Approved | Approved | Approved | Approved | Initiated |
| 129 | GS6W8HNJ | 2010-05-20 | 2-2011 | Briggs, J. Blair | Integral Tests of Molybdenum at VNIITF | Approved | Approved | Approved | Approved | Initiated |
| 114 | TSG5K9LN | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Acrylic | Approved | Approved | Approved | Approved | Initiated |
| 106 | SW3S8JHK | 2007-12-19 | On hold | Mattingly, John Kelly | Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data | Approved | Approved | Approved | Approved | Initiated |
| 126 | RBX5YNY7 | 2009-11-18 | 1-2010 | Miller, Thomas Martin | SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses | Approved | Approved | Approved | Initiated | |
| 130 | 7POMVQ2E | 2010-05-20 | On hold | Briggs, J. Blair | Integral Tests of Nickel at VNIITF | Approved | Approved | Approved | Initiated | |
| 109 | 5RFRO0UM | 2008-05-27 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Nickel | Approved | Approved | Initiated | | |
| 112 | CES6HH0I | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Lead | Approved | Approved | Initiated | | |
| 111 | GFQ3M0HP | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Copper | Approved | Approved | Initiated | | |
| 113 | Z3TF8JKY | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Manganese | Approved | Approved | Initiated | | |
| 134 | BFD48UOQ | 2010-08-17 | 8-2010 | Lee, Chuck K | This is a test | Approved | Pending | | | |
| 135 | 2FRVJON8 | 2010-09-07 | | Harms, Gary Alan | Reactor Physics and Criticality Benchmark Experiments for Advanced Nuclear Fuel | Approved | Initiated | | | |
| 137 | W1QCY0HU | 2010-10-11 | | White, Morgan C | High Precision HEU Critical Assembly Measurements To Understand Reproducibility | Approved | Pending | | | |
| 138 | ZBCTUYU0 | 2010-10-18 | | Jaegers, Peter J | Probability of Initiation Benchmark Experiments | Approved | Pending | | | |
| 136 | 2FSF07MJ | 2010-09-30 | | Bredeweg, Todd | Reaction rate and fission-product yield measurements in Pu-239 and U-238,235 | Approved | Pending | | | |
| 128 | C2VFLYO9 | 2010-01-14 | | Reynolds, Kevin H | Juliett | Approved | Initiated | | | |
| 123 | 3SXDL8KP | 2009-09-03 | | Hutchinson, Jesson | Cadmium Reflected | Approved | Pending | | | |



IER Form – Facility Members Access Only – cont.

DOE NCSP IER Main Display CEDT Members Pr...

CEDT Process Status: CED-3

Request Date: 2009-11-18 **Priority Year:** 1-2010 **CedT Status:** Initiated

Tracking/Unique Number: PEDSYNY7

Requestor Name:

| Last Name: | First Name: | Middle Name: | E-mail Address: |
|------------|-------------|--------------|------------------|
| Miller | Thomas | Marlin | tmiller@domt.gov |

Affiliation: Oak Ridge National Laboratory

Telephone No.: 865-574-9909

Experimental Request Title: SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses

Experiment Type: Critical

NCSP Manager comments: {1000 chars max}

This is authorized for performance according to the Final Design Plan.

File Attachment(s): **Select a file to upload into IER form:**

[ced-0.doc](#)
[partially_shielded_pictures.doc](#)
[SILENE_2010_CED-2_final_plan.doc](#)
[SILENE_2010_CED-2_final_plan.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.doc](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL1.pdf](#)
[SILENE_LasVegas_CED2.pdf](#)

NDAG Member:

| Last Name: | First Name: | Middle Name: | E-mail Address: |
|------------|-------------|--------------|-----------------|
| McKnight | Dick | | rdmcknight.gov |
| Heinrichs | David | Paul | heinrichs1.gov |

Methods Member:

| Last Name: | First Name: | Middle Name: | E-mail Address: |
|------------|-------------|--------------|-----------------|
| Hopper | Calvin | | hoppercm.gov |

Experiment Member:

| Last Name: | First Name: | Middle Name: | E-mail Address: |
|------------|-------------|--------------|---|
| Auquier | Nicolas | | nicolas-auquier@orengo.fr |
| | | | Re-Type E-mail Address: nicolas-auquier@orengo.fr |

ICSBEP evaluator:

| Last Name: | First Name: | Middle Name: | E-mail Address: |
|------------|-------------|--------------|--|
| Ellis | Nichole | | ellis_9899@msn.com |
| | | | Re-Type E-mail Address: ellis_9899@msn.com |

Modify CEDT Status: CED-3 **UNLOCK CED-2**

| | | |
|---------------------------------|---------------------------------|------------------------------------|
| <input type="radio"/> Pending | <input type="radio"/> Approved | <input type="radio"/> Unlock CED-2 |
| <input type="radio"/> Initiated | <input type="radio"/> Completed | |

Print Page Close Window



IER Form – Administrative Access Only

DOE NCSP IER Main Display CEDT Admin Proce...

| CEDT Admin Process Status | | | | | | | | | | |
|---------------------------|--------------------------|--------------|---------------|-----------------------|---|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| Record No. | Tracking number | Request Date | Priority-Year | Requestor Name | Experimental Request Title | CED-0 | CED-1 | CED-2 | CED-3 | CED-4 |
| 107 | 2ZQD7OOL | 2008-02-04 | 2-2011 | Saylor, Ellen Marie | Use of BoroBond ⁴ ™ as a Fixed Neutron Absorber | Approved | Completed | | | |
| 104 | P0P06DZQ | 2007-12-04 | 1-2011 | Heinrichs, David Paul | Vanadium as a Reflector, Diluent or Absorber | Approved | Completed | | | |
| 105 | L0HLDCB5 | 2007-12-05 | 1-2012 | Heinrichs, David Paul | Spherical Lattice of Alternating HEU and Polyethylene or Lucite Shells | Approved | Completed | | | |
| 110 | EZ2BKJ00 | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Tungsten | Approved | Approved | Approved | Approved | Initiated |
| 129 | GS6W8HNU | 2010-05-20 | 2-2011 | Briggs, J. Blair | Integral Tests of Molybdenum at VNIITF | Approved | Approved | Approved | Approved | Initiated |
| 114 | TSG5K9LN | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Acrylic | Approved | Approved | Approved | Approved | Initiated |
| 108 | SW3S8JHK | 2007-12-19 | On hold | Mattingly, John Kelly | Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data | Approved | Approved | Approved | Approved | Initiated |
| 126 | RBX5YNY7 | 2009-11-18 | 1-2010 | Miller, Thomas Martin | SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses | Approved | Approved | Approved | Initiated | |
| 130 | 7POMVQ2E | 2010-05-20 | On hold | Briggs, J. Blair | Integral Tests of Nickel at VNIITF | Approved | Approved | Approved | Initiated | |
| 109 | 5RFRO0UM | 2008-05-27 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Nickel | Approved | Approved | Initiated | | |
| 112 | CES6HH0I | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Lead | Approved | Approved | Initiated | | |
| 111 | GFQ3M0HP | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Copper | Approved | Approved | Initiated | | |
| 113 | Z3TF8JKY | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Manganese | Approved | Approved | Initiated | | |
| 134 | BFD48UQO | 2010-08-17 | 8-2010 | Lee, Chuck K | This is a test | Approved | Pending | | | |
| 135 | 2FRVUON8 | 2010-09-07 | | Harms, Gary Alan | Reactor Physics and Criticality Benchmark Experiments for Advanced Nuclear Fuel | Approved | Initiated | | | |
| | | | | | High Precision HEU | | | | | |



IER Form – Administrative Access Only – cont.

DOE NCSP IER Main Display CEDT Admin Proce...

CEDT Process Status: CED-3

← PREVIOUS

Request Date: 2009-11-18 Priority Year: 1-2010 CEDT Status: Initiated

Tracking/Unique Number: REK5YNY7 Facility: ☐ CEF

Requestor Name:

| | | | |
|------------|-------------|--------------|------------------|
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| Miller | Thomas | Martin | tmiller@ornl.gov |

Affiliation: Oak Ridge National Laboratory

Telephone No.: 865-574-9903

Experimental Request Title: SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses

Experiment Type: Critical

NCSP Manager comments: [1000 chars max]

This is authorized for performance according to the Final Design Plan.

File Attachment(s):

Select a file to upload into IER form:
Please click on the upload button to attach a file:

[ced-0.doc](#)
[partially_shielded_pictures.doc](#)
[SILENE_2010_CED-2_final_plan.doc](#)
[SILENE_2010_CED-2_final_plan.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.doc](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL.pdf](#)
[SILENE_2010_DRAFT_ExptPlan_ORNL1.pdf](#)
[SILENE_LasVegas_CED2.pdf](#)

NDAG Member:

| | | | |
|---|-------------|--------------|-----------------|
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| <input checked="" type="radio"/> McKnight | Dick | | rdmcknight.gov |
| <input type="radio"/> Heinrichs | David | Paul | heinrichs1.gov |

Methods Member:

| | | | |
|---|-------------|--------------|-----------------|
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| <input checked="" type="radio"/> Hopper | Calvin | | hoppercm.gov |

Experiment Member:

| | | | |
|------------|-------------|--------------|---------------------------|
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| Authier | Nicolas | | nicolas-authier@orange.fr |
| | | | Re-Type E-mail Address: |
| | | | nicolas-authier@orange.fr |

ICSBEP evaluator:

| | | | |
|------------|-------------|--------------|-------------------------|
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| Ellis | Nichole | | jellis_9899@msn.com |
| | | | Re-Type E-mail Address: |
| | | | jellis_9899@msn.com |

Modify CEDT Status: CED-3

| | | |
|--|---------------------------------|------------------------------------|
| <input type="radio"/> Pending | <input type="radio"/> Approved | <input type="radio"/> UNLOCK CED-2 |
| <input checked="" type="radio"/> Initiated | <input type="radio"/> Completed | <input type="radio"/> Unlock CED-2 |



IER Form – NDAG Approval (NDAG Chair Only)

| DOE NCSP IER Main | | | | | |
|--------------------------|------------|--------------------------|--|---|----------------|
| Display CED Status | | | | | |
| Tracking number | Date | Name | Affiliation | Experimental Request Title | Status |
| D4AGJYN0 | 2010-11-05 | Nakae, Leslie F. | LLNL | Approach to low densities | Pending |
| P9PORAQ3 | 2010-11-05 | Rowland, Mark | Illnl | Approach to Matrix Effects | Pending |
| Q7PY3GSE | 2010-11-05 | Church, Jennifer A. | LLNL | Time Dependent Assay of Activation Foils | Pending |
| D5WXP9JH | 2010-11-05 | Walston, Sean Eric | LLNL | Benchmarking Multiplication Calculations with Neutron Multiplicity Measurements | Pending |
| GF4V8PNL | 2011-01-25 | White, Morgan C | LANL | High Precision Plutonium Critical Assembly Measurements | Pending |
| JMJ9TT3A | 2008-09-23 | Kerr, Brad R | Parsons | Thermal neutron absorption cross-section data for titanium. | Pending |
| QT4RI8LH | 2011-01-20 | Kenneally, Jacqueline | LLNL | Fission product studies | Pending |
| F4XAK0NM | 2011-01-25 | White, Morgan C | LANL | Measure The Fission Neutron Spectrum Shape Using Threshold Activation Detectors | Pending |
| EQC38KPM | 2011-01-17 | Heinrichs, David Paul | Lawrence Livermore National Laboratory | Reference values of the Godiva radiation field in DAF | Pending |
| J8KMVCF8 | 2011-01-18 | Heinrichs, David Paul | Lawrence Livermore National Laboratory | 2012 International Intercomparison Exercise for NAD at the DAF using Godiva | Pending |
| H9YYDC1B | 2011-01-24 | Little, Robert C | Los Alamos National Laboratory | NCT / NTNF Material # 1 | Pending |
| T3WQY7OM | 2011-01-24 | Little, Robert C | Los Alamos National Laboratory | NCT / NTNF Material # 2 | Pending |
| 8KUY4CXT | 2011-02-08 | Kahler, Albert (Skip) | LANL | Be Reflector Studies | Pending |
| W3FROL8N | 2008-07-02 | Westfall, Robert Michael | ORNL | Mass Limits for U-235 in Landfill Burials | Return to user |
| DDZ18HPP | 2008-04-15 | John, Wagner Charles | ORNL | Fission Products and Minor Actinides for Spent Fuel Burnup Credit | Return to user |
| W3GC7LHL | 2009-09-03 | Hutchinson, Jesson | Los Alamos National Laboratory | Additional Critical Experiments with the BERP ball reflected by Beryllium | Return to user |



IER Form – NDAG Approval (NDAG Chair Only) – cont.

DOE NCSP IER Main Display IER form by tracki...

REQUEST FOR INTEGRAL EXPERIMENTS FORM

Form Status: Status:

Requestor Name: _____

Last Name: First Name:

Affiliation:

E-mail Address:

Telephone No.:

Status:

Pending - Waiting for NCSP Manager's action.

Return to user - Requestor needs to provide additional information.

Accepted - NCSP Manager is thinking about it.

Approved - All requirements are satisfied and proceeding to CED-1.

Rejected - IER form is rejected. Requestor needs to submit a new IER form.

Experimental Request Title:

Description of Application/Purpose (same level of detail as in DOE-STD-3007-2007); [6000 chars max]

The NCT (Nuclear Counter Terrorism) and NTNF (National Technical Nuclear Forensics) Programs have requirements associated with non-traditional materials.

This request is associated with what I am calling "Material # 1." After further conversations, it might be possible to identify the material; for now I have chosen not to. The material is available, but is currently at Los Alamos, so transportation to CEF must be arranged.

We would like to perform a series of critical, super-critical, and sub-critical measurements. There will also be a need to include associated experiments, such as activations, foils, and spectra. See "Suggested Experiment Concept" for a general outline of what we envision.

Select those that apply and explain:

Programmatic Funding Available (optional):

User Assessment of Available Integral Data (ICSBEP, Published, Un-Published, etc.); [6000 chars max]

Minimal previous data of benchmark quality. We have performed analysis of available data. Reports available to those with need to know.

Suggested Experiment Concept (optional); [6000 chars max]

- ☐ Critical Configurations
 - ☐ Prefer to have sufficient material to drive criticality (we do have in this case)
 - ☐ Material must be well-characterized for benchmark-quality results (we have characterization data)
 - ☐ Measure critical conditions with variety of reflectors
- ☐ Super-critical dynamic measurements also of interest
- ☐ In addition



IER Form – NDAG Approval (NDAG Chair Only) – cont.

File Attachment:

CedT Manager comments:[6000 chars max]

NDAG Chairperson comments:[6000 chars max]
 This proposal (and its counterpart) are very generic in statement, but appear very focused on addressing the NC T and NINF Program needs. The measurements fit well into the desired capabilities of the CEF.

NCSP Manager comments:[6000 chars max]

CedT MANAGER Section Only

Tracking/Unique Number: H9YYDC1B **Facility:** ☐ CEF

☒ Meets Requirements to Submit to NDAG
☐ Does Not Meets Requirements to Submit to NDAG

NDAG Section Only

NDAG Actions:

NDAG Actions:
 Pending - Waiting for NDAG Chairperson's action.
 Further review - NDAG Chairperson needs to study it.
 Accepted - NDAG Chairperson is thinking about it.
 Concur - NDAG Chairperson recommends it to proceeding to CED-1.

NCSP Approval

NCSP Manager Approval IER-0:

The Requestor acknowledges all information is approved for public release. ☒ I Agree

DC Name or Review and Release Number:



IER Form – NCSP Manager Approval (DOE HQ Only)

| C _{ED} T Process Status | | | | | | | | | | |
|----------------------------------|---------------------------|--------------|---------------|-----------------------|---|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Record No. | Tracking number | Request Date | Priority-Year | Requestor Name | Experimental Request Title | CED-0 | CED-1 | CED-2 | CED-3 | CED-4 |
| 107 | 2ZQD7OOL | 2008-02-04 | 2-2011 | Saylor, Ellen Marie | Use of BoroBond TM as a Fixed Neutron Absorber | Approved | Completed | | | |
| 104 | P0P08DZQ | 2007-12-04 | 1-2011 | Heinrichs, David Paul | Vanadium as a Reflector, Diluent or Absorber | Approved | Completed | | | |
| 105 | L0HLD0B5 | 2007-12-05 | 1-2012 | Heinrichs, David Paul | Spherical Lattice of Alternating HEU and Polyethylene or Lucite Shells | Approved | Completed | | | |
| 110 | EZ2BKIO0 | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Tungsten | Approved | Approved | Approved | Approved | Initiated |
| 129 | GS6W8HNU | 2010-05-20 | 2-2011 | Briggs, J. Blair | Integral Tests of Molybdenum at VNIITF | Approved | Approved | Approved | Approved | Initiated |
| 114 | TSG5K9LN | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Acrylic | Approved | Approved | Approved | Approved | Initiated |
| 106 | SW3S8JHK | 2007-12-19 | On hold | Mattingly, John Kelly | Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data | Approved | Approved | Approved | Approved | Initiated |
| 126 | RBX5YNY7 | 2009-11-18 | 1-2010 | Miller, Thomas Martin | SILENE Benchmark Measurements for Criticality Accident Alarm System Analyses | Approved | Approved | Approved | Initiated | |
| 130 | 7POMVQ2E | 2010-05-20 | On hold | Briggs, J. Blair | Integral Tests of Nickel at VNIITF | Approved | Approved | Approved | Initiated | |
| 109 | 5RFRO0UM | 2008-05-27 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Nickel | Approved | Approved | Initiated | | |
| 112 | CES6HH0I | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Lead | Approved | Approved | Initiated | | |
| 111 | GFQ3M0HP | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Copper | Approved | Approved | Initiated | | |
| 113 | Z3TF8JIKY | 2008-06-30 | On hold | Hutchinson, Jesson | Plutonium Sphere Reflected with Manganese | Approved | Approved | Initiated | | |
| 134 | BFD48UOO | 2010-08-17 | 8-2010 | Lee, Chuck K | This is a test | Approved | Pending | | | |
| 135 | 2EDVJ0N9 | 2010-09-07 | | Harms, Gary | Reactor Physics and Criticality Benchmark | Approved | Initiated | | | |



IER Form – NCSP Manager Approval (DOE HQ Only) – cont.

DOE NCSP IER Main DOE NCSP IER Main IER Manager Home Page Display CED-1 form

CEdT Process Status: CED-1

[← PREV](#)

| | | | |
|--|------------------|---|---|
| Request Date: 2010-09-07 | | Priority Year: <input type="text"/> | CEdT Status: <input type="text" value="Initiated"/> |
| Tracking/Unique Number: 2FRVUON8 | | Facility: <input type="checkbox"/> CEF | |
| Requestor Name: | | | |
| Last Name: Harms | First Name: Gary | Middle Name: Alan | E-mail Address: geharms@sandia.gov |
| Affiliation: Sandia National Laboratories | | | |
| Telephone No.: (505)845-3244 | | | |
| Experimental Request Title: Reactor Physics and Criticality Benchmark Experiments for Adva | | | |
| Experiment Type: <input type="text"/> | | | |
| NCSP Manager comments:[1000 chars max] | | | |
| | | | |
| File Attachment(s): | | | |
| 7Up-NT-04083.pdf | | | |
| NERI01-124FinalTechnicalReport.pdf | | | |
| NDAG Member: | | | |
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| <input type="radio"/> McKnight | Dick | | rdmcknight@anl.gov |
| <input checked="" type="radio"/> Heinrichs | David | Paul | heinrichs1@llnl.gov |
| Methods Member: | | | |
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| <input checked="" type="radio"/> Hopper | Calvin | | hoppercm@ornl.gov |
| Experiment Member: | | | |
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| Harms | Gary | A | geharms@sandia.gov |
| ICSBE evaluator: | | | |
| Last Name: | First Name: | Middle Name: | E-mail Address: |
| Harms | Gary | A | geharms@sandia.gov |
| Re-Type E-mail Address: geharms@sandia.gov | | | |
| Modify CedT Status: CED-1 | | UNLOCK CED-0 | |
| <input type="radio"/> Pending <input checked="" type="radio"/> Initiated | | <input type="radio"/> Approved <input type="radio"/> Completed <input type="radio"/> Unlock CED-0 | |
| <input type="button" value="Submit"/> <input type="button" value="Reset"/> <input type="button" value="Cancel"/> | | | |



IER Form – NCSP Manager Approval (DOE HQ Only) – cont.

DOE NCSP IER Main DOE NCSP IER Main IER Manager Home Page Display IER

SEND EMAIL MESSAGE TO REQUESTOR

Integral Experiments Request Form - Your action may be required!

The following integral experiments request will be deleted from NCSP Website in 30 days. Please submit all required information into the Integral Experiments Request Form or email CEDT manager Nichole Ellis at ellis_9899@msn.com to clarify your intentions.

☐ Replace my current message with the following

Submittal date: 2008-07-02 Form Status: Working draft Status: Return to user

Tracking/Unique Number: W3FROL8N

Requestor Name:

Last Name: Westfall First Name: Robert Middle Name: Michael

Affiliation: ORNL

E-mail Address: westfallrm@ornl.gov

Telephone No.: 865-574-5269

Experimental Request Title: Mass Limits for U-235 in Landfill Burials

Please click on the URL below to display the IER form.
http://ncsp.llnl.gov/cgi-bin/display_form.pl?Tracking=W3FROL8N

Send It! Close Window



IER Form – Email notification

From: ellis_9899@msn.com <ellis_9899@msn.com>
Date: Monday, February 7, 2011 1:31 PM
To: westfallrm@ornl.gov <westfallrm@ornl.gov>
Cc: Default, ellis_9899@msn.com, Jerry_McKamy
Subject: Action may be required on your Integral Experiments Request Form – W3FROL8N

Integral Experiments Request Form - Your action may be required

The following integral experiments request will be deleted from NCSP Website in 30 days if you do not provide follow-up actions. Please submit all required information into the Integral Experiments Request Form or email CEDT manager Nichole Ellis at ellis_9899@msn.com to clarify your intentions.

Submittal date: 2008-07-02
Form Status: Working draft
Status: Return to user
Name: Robert Michael Westfall
Affiliation: ORNL
Email: westfallrm@ornl.gov
Telephone: 865-574-5269

Experimental Request Title; Mass Limits for U-235 in Landfill Burials

Please click on the URL below to display the IER form.
http://ncsp.llnl.gov/cgi-bin/display_form.pl?Tracking=W3FROL8N



IER Form – Email announcement

From: j.briggs@inl.gov <j.briggs@inl.gov>
Date: Thursday, August 19, 2010 9:09 AM
To: j.briggs@inl.gov <j.briggs@inl.gov>
Cc: Jerry_McKamy, Nichole Ellis, Lee, Chuck K., Lori Scott, jamorman@anl.gov, hoppercm@ornl.gov, REAnderson@lanl.gov, David.Erickson@srs.gov, garciaas@id.doe.gov, heinrichs1, tpm@pobox.gov, reedda@ornl.gov, fitz.trumble@wsms.com, robert.wilson@emcbc.doe.gov, James_Felty, ivon.fergus@oa.doe.gov, rdmcknight@anl.gov, Tye.Ponder@nnsa.doe.gov, mimtar@aol.com, htoffer@aol.com, WestfallRM@ornl.gov, j.briggs@inl.gov, danony@rpi.edu, dunnme@ornl.gov, guberkh@ornl.gov, dkhayes@lanl.gov, tony.hill@lanl.gov, akahler@lanl.gov, kawano@lanl.gov, ...
Subject: IER form CED-1 has been Approved by NCSP Manager - 7POMVQ2E

Modification time: Thu Aug 19 09:09:07 PDT 2010

Form Status: Final

Name: J. Blair Briggs

Affiliation: Idaho National Laboratory

E-mail: j.briggs@inl.gov

Telephone: 208 526 7628

Experimental Request Title: Integral Tests of Nickel at VNIITF

Please click on the URL below to display IER form status.

http://ncsp.llnl.gov/cgi-bin/current_status.pl



IER Form – Email announcement – cont.

From: jkmatti@sandia.gov <jkmatti@sandia.gov>

Date: Thursday, January 27, 2011 10:08 PM

To: jkmatti@sandia.gov <jkmatti@sandia.gov>

Cc: Jerry_McKamy, Nichole Ellis, Default, Lori Scott, jamorman@anl.gov, hoppercm@ornl.gov, REAnderson@lanl.gov, David.Erickson@srs.gov, garciaas@id.doe.gov, heinrichs1, tpm@pobox.gov, reedda@ornl.gov, fitz.trumble@wsms.com, robert.wilson@emcbc.doe.gov, James_Felty, ivon.fergus@oa.doe.gov, rdmcknight@anl.gov, Tye.Ponder@nnsa.doe.gov, mimtar@aol.com, htoffer@aol.com, WestfallRM@ornl.gov, j.briggs@inl.gov, danony@rpi.edu, dunnme@ornl.gov, guberkh@ornl.gov, dkhayes@lanl.gov, tony.hill@lanl.gov, akahler@lanl.gov, kawano@lanl.gov, ...

Subject: IER form CED-2 has been Approved by NCSP Manager – SW3S8JHK

For Your Information Only

Modification time: Thu Jan 27 22:08:48 PST 2011

Form Status: Final

Name: John Kelly Mattingly

Affiliation: Sandia National Laboratories

E-mail: jkmatti@sandia.gov

Telephone: 5058444166

Experimental Request Title: Polyethylene-Reflected Plutonium Neutron Multiplicity and Gamma Spectral Data

Please click on the URL below to display IER form status.

http://ncsp.llnl.gov/cgi-bin/current_status.pl



IER Form – Email announcement – cont.

From: jesson@lanl.gov <jesson@lanl.gov>

Date: Thursday, January 27, 2011 10:08 PM

To: jesson@lanl.gov <jesson@lanl.gov>

Cc: Jerry_McKamy, Nichole Ellis, Default, Lori Scott, jamorman@anl.gov, hoppercm@ornl.gov, REAnderson@lanl.gov, David.Erickson@srs.gov, garciaas@id.doe.gov, heinrichs1, tpm@pobox.gov, reedda@ornl.gov, fitz.trumble@wsms.com, robert.wilson@emcbc.doe.gov, James_Felty, ivon.fergus@oa.doe.gov, rdmcknight@anl.gov, Tye.Ponder@nnsa.doe.gov, mimtar@aol.com, htoffer@aol.com, WestfallRM@ornl.gov, j.briggs@inl.gov, danony@rpi.edu, dunnme@ornl.gov, guberkh@ornl.gov, dkhayes@lanl.gov, tony.hill@lanl.gov, akahler@lanl.gov, kawano@lanl.gov, ...

Subject: IER form CED-3 has been Approved by NCSP Manager – TSG5K9LN

For Your Information Only

Modification time: Thu Jan 27 22:08:01 PST 2011

Form Status: Final

Name: Jesson Hutchinson

Affiliation: Los Alamos National Laboratory

E-mail: jesson@lanl.gov

Telephone: 5056675411

Experimental Request Title: Plutonium Sphere Reflected with Acrylic

Please click on the URL below to display IER form status.

http://ncsp.llnl.gov/cgi-bin/current_status.pl



Topics of this briefing

- Brief history of the Integral Experiments Request (IER) Form
- The current IER Form
- Future plans
- Q & A



Future plans for Integral Experiments form

- **Continue to enhance Integral Experiments form**
 - Provide on-demand pop-up text box
 - Provide various check boxes to filter IER forms into different piles (completed, archive, facilities, exported, etc)
- **Enhance the request process**
- **Export request form and data to be published in ICSBEP**
- **Maintain records for all integrated experiments**
- **Create a new classified NCSP website to host future classified NCSP IER / benchmark data**



Topics of this briefing

- Brief history of the Integral Experiments Request (IER) Form
- The current IER Form
- Future plan
- Q & A



Questions or Suggestions?

Nichole Ellis

POC for Comments/Suggestions to Integral
Experiments form/process

Phone: 803-381-3710

Email: ellis_9899@msn.com

Chuck K. Lee

DOE NCSP Website Webmaster

Phone: 925-422-0482

FAX: 925-423-3116

Email: lee12@llnl.gov

